

L 00867-66

ACCESSION: AT5013065

specific back tension being 2.5 - 3 kg/mm<sup>2</sup>, and the front tension, 3.5 - 4.5 kg/mm<sup>2</sup>. The data obtained can be used for the plant operation of the two-stand rolling mill, and also by designers of the mechanical and electrical equipment of continuous foil rolling mills. "Eng. A. N. Trishchevskiy participated in the work." Orig. art. has: 5 figures and 1 table.

ASSOCIATION: Leningradskiy politekhnicheskii institut (Leningrad Polytechnic Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: IE

NO REF SOV: 003

OTHER: 000

Card 2/2

1. 000001-07 EN (k)/EST(m)/ZNF(w)/ZNF(t)/ETI IJP(c) JD/HH/JG

ACC NR: AR6033116

SOURCE CODE: UR/0137/66/000/007/1073/1073

AUTHOR: Bogoyavlenskiy, K. N.; Ris, V. V.; Grigor'yev, A. K.

TITLE: Changes in mechanical properties of sheet molybdenum and niobium in relation to the degree of preliminary deformation

SOURCE: Ref. zh. Metallurgiya, Abs. 71495

REF SOURCE: Tr. Leningr. politekhn. in-ta, no. 260, 1965, 28-31

TOPIC TAGS: metal deformation, molybdenum, niobium, mechanical property, cold rolling, yield strength, yield point, hardness, elongation

ABSTRACT: An attempt has been made to plot the curves  $\sigma_b, \sigma_{0.2}, \delta, H_V$  and the coefficients, establishing the relationship between  $H_V, \sigma_b$ , and  $\sigma_{0.2}$  as a function of the degree cold rolling/deformation of (up to  $\sim 5\%$ ). Cast and sintered Mo and Nb were tested. It was shown that there were no changes in  $\sigma_b$  and  $\sigma_{0.2}$  of cast Mo with an increase in deformation, while  $\delta$  decreased from 7 to  $\sim 1\%$ . For sintered Mo,  $\delta$  decreased practically up to 0%, while  $\sigma_b$  and especially  $\sigma_{0.2}$  increased almost linearly, reaching about 100 kg/mm<sup>2</sup> at

Card 1/2

UDC: 669.28:620.17+669.293:620.17

L 09394-67

ACC NR: AR6033116

$\epsilon$ : 55%. In the case of Nb, a sharper decrease of  $\delta$  was observed for cast material. It was shown that  $\sigma_b$  and  $\sigma_{0.2}$  of sintered Nb reach about 75 kg/mm<sup>2</sup> at  $\epsilon$ : 35% and then remain unchanged. P. Novik. [Translation of abstract]

SUB CODE: 11/

Card 2/2

L 10829-67 EWT(d)/EWT(m)/EWP(v)/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) IJP(c) JD/HW/  
ACC NR AR6034747 SOURCE CODE: UR/0276/66/000/007/V030/V030 JG

38

AUTHOR: Bogoyavlenskiy, K. N. ; Khoroshaylov, V. G. ; Ris, V. V.

TITLE: Straightening thin-walled molybdenum profiles by stretching

SOURCE: Ref. zh. Tekhnologiya mashinostroyeniya, Abs. 7V245

REF SOURCE: Tr. Leningr. politekhn. in-ta, No. 260, 1965, 89-92

TOPIC TAGS: molybdenum, tensile stress, straightening, molybdenum profile, molybdenum part

ABSTRACT: A unit has been developed at the Leningrad Polytechnic Institute for straightening shaped thin-walled profiles by heating the part up to 250C in an argon atmosphere in the process of straightening. The optimum values of the specific tensile stresses during straightening profiles with walls 2-mm thick are 60—80 kg/min<sup>2</sup>. Orig. art. has: 3 figures. I. Gendlina. [Translation of abstract]

SUB CODE: 11/

Cord 1/1 <sup>6/10</sup>

UDC: 621.982.47

ACC NR: AT7003267

(A)

SOURCE CODE: UR/2563/66/000/263/0062/0071

AUTHORS: Bogoyavlenskiy, K. N. (Doctor of technical sciences, Professor);  
Khoroshchikov, V. G.; Khyubner, S.

ORG: none

TITLE: Connecting high-strength reinforcements by the method of pressing sleeves in the cold state

SOURCE: Leningrad. Politekhnikheskiy institut. Trudy, no. 263, 1966. Mashiny i tekhnologiya obrabotki metallov davleniyem (Machinery and technology of metalworking by pressure), 62-71

TOPIC TAGS: reinforced concrete, metal pressing, tensile test, high strength steel, steel alloy, iron, hardness/ 80S high strength steel, 18KhNVA high strength steel, Kh12M high strength steel, 25GS steel, 35GS steel, 10 steel, 45 steel, 40Kh steel, St 3 steel, Armco iron

ABSTRACT: The results of tests of reinforcing steel for reinforced concrete constructions are presented. These steel reinforcements were press-fitted by means of steel and Armco iron sleeves, and the tests were performed with a 100-ton tensile testing machine. The force required to create a mechanical connection of a reinforcement of 80S high-strength steel that was not inferior in strength to the metal of the reinforcement is found (see Fig. 1). Plastic metals of low mechanical strength (such

Card 1/2

ACC NR: AT7003267

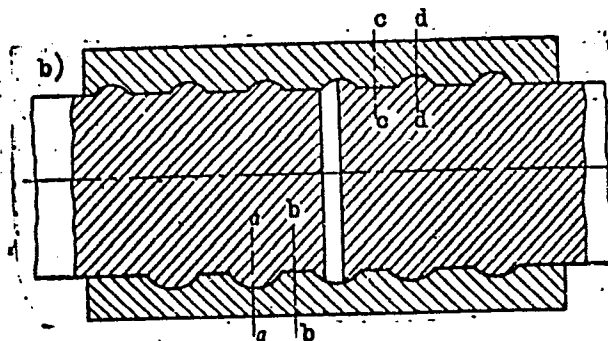
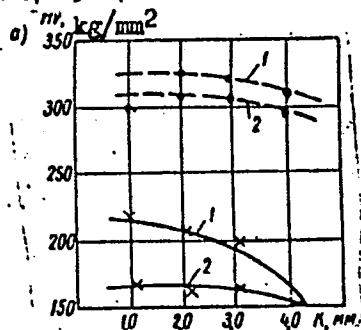


Fig. 1. Graph of hardness HV of connecting sleeve and reinforcing rod after press fitting (a) as a function of point of contact K of rod with sleeve (b): 1 - cross section a-a (d-d); 2 - cross section b-b (c-c); x - sleeve; e - rod

as 10 steel and Armco iron) are recommended for the connecting sleeves. The best results are obtained with square pressing blocks which should be made of a high-strength steel such as 18KhNVA or Kh12M. The length of the sleeves should be 2--2.5 times the diameter of the reinforcing rod. Devices for press-fitting the sleeves are discussed. The authors thank engineers S. G. Skvortsov and R. A. Gershanok. Orig. art. has: 2 tables, 1 photograph, 1 graph, and 6 diagrams.

SUB CODE: 11, 13, 14/ SUBM DATE: none

Card 2/2

ACC NR: AT7003262 (N) SOURCE CODE: UR/2563/66/000/263/0039/0041

AUTHOR: Bogoyavlenskiy, K.N.; Gyulikhandanov, Ye.L.; Ris, V.V.;  
Khoroshaylov, V.G.

ORG: none

TITLE: Investigation of the ductility of the VN-2 niobium alloy

SOURCE: Leningrad. Politekhnikheskiy institut. Trudy, no. 263, 1966.  
Mashiny i tekhnologiya obrabotki metallov davleniyem (Machinery and  
technology of metalworking by pressure), 39-41

TOPIC TAGS: niobium alloy, ductility, sheet metal, durability, hardness,  
annealing, metal cutting, elongation / VN-2 niobium alloy

ABSTRACT:

To ascertain the feasibility of forming thin-wall VN-2 niobium-alloy  
shapes, cold-rolled alloy specimens 70 mm long, 10 mm wide and 0.2 or  
0.5 mm thick, cut at an angle of 0.45° or 90° to the direction of  
rolling, were tested in the as-rolled and vacuum-annealed (0.5 hr at  
1000—1200) conditions. It was found that vacuum annealing lowered the  
hardness and strength from 95—107 kg/mm<sup>2</sup> and 225—245 kg/mm<sup>2</sup> to 55—90 kg/mm<sup>2</sup>  
and 165—200 kg/mm<sup>2</sup>, respectively, depending on the annealing temperature.

Card 1/2

UDC: 621.97.001.5

ACC NR: AT7003262

At the same time, the elongation increased from 1—2.5% for as-rolled alloy to 23—24% for specimens cut at an angle of 45°, and 15—19% for longitudinal and transverse specimens annealed at 1200C. A considerable anisotropy of mechanical properties was observed in annealed specimens. Specimens cast at 45° to the direction of rolling had a lower strength and a higher ductility than longitudinal and transverse specimens. The best combination of mechanical and technological properties of niobium-alloy sheets was attained by vacuum annealing (not in argon) at a temperature of 1100—1150C. Thin-wall shapes can be formed from VN-2 alloy sheets 0.2 or 0.5 mm thick by bending, if the bend radius is maintained equal to or greater than the sheet thickness. Orig. art. has: 2 tables [ND]

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 002/  
ATD PRESS: 5115

Cord 2/2



ACC NR: AT7003264

AUTHOR: Bogoyavlenskiy, K. N. (Doctor of technical sciences; Professor);  
Samarin, Yu. F.; Borisov, V. G.; Khoroshaylov, V. G.; Gyulikhandanov, Ye. L.

SOURCE CODE: UR/2563/66/000/263/0048/0050

ORG: none

TITLE: Roll bending of structural shapes from solution-annealed heat-treatable aluminum alloys

SOURCE: Leningrad. Politekhnikheskiy institut. Trudy, no. 263, 1966. Mashiny i tekhnologiya obrabotki metallov davleniyem (Machinery and technology of metalworking by pressure), 48-50

TOPIC TAGS: aluminum alloy, <sup>annealing, fabricated structural metal,</sup> ~~roll bending, solution-annealed aluminum alloy,~~ <sup>alloy</sup> heat treatable <sup>metal</sup> aluminum alloy

ABSTRACT:

A study has been made to determine the maximum allowable time interval between solution annealing and roll bending of aluminum-alloy structural shapes. D16-AM aluminum alloy specimens (2—3 mm thick, 71—73 mm wide and 500 mm long), solution annealed at 495C and quenched in water, were roll bent within 20 to 120 minutes from the time of quenching. For comparison, some specimens were bent 200 hr after quenching (solution annealed and artificially aged), and some were bent after solution annealing and slow cooling. It was found that cracks

UDC: 621.97.001.5

Card 1/2

ACC NR: AT7004520

SOURCE CODE: UR/2563/66/000/268/0052/0058

AUTHOR: Bogoyavlenskiy, K.N.; Gyulikhandanov, Ye.L.; Ris, V.V.;  
Khoroshaylov, V.G.

ORG: none

TITLE: Investigation of TsM-2a molybdenum alloy

SOURCE: Leningrad. Politekhnikheskiy institut. Trudy, no. 268, 1966.  
Metallovedeniye (Metal science), 52-58

TOPIC TAGS: molybdenum alloy, <sup>alloy,</sup> ~~cold-rolled alloy, alloy strength, alloy~~  
~~ductility, alloy annealing, alloy microstructure~~/TsM2a alloy

ABSTRACT:

Experiments have been made to improve the poor ductility of cold-rolled TsM-2a molybdenum-alloy sheets, 0.2, 0.3 and 0.5 mm thick, used for forming intricate parts. To determine the effect of the annealing temperature, time and ambient media on mechanical properties and microstructure, test specimens were cut from the sheets along and at 45 degrees to the direction of rolling, and annealed for 15 min in argon at 1100—1200°C, in hydrogen at 1100—1400°C, or in a vacuum of  $10^{-3}$  and  $10^{-5}$  mm Hg at 1100 to 1250 and 1250—1450°C, respectively. Annealing at 110—1150°C for 15 min produced the best combination of mechanical properties, regardless of

Card 1/2

UDC: none

ACC NR: AT7004520

the ambient media used; against a 20—30% decrease in the tensile strength of the as-rolled sheets, the elongation increased from 1.0—2.0% to 3—7% and the "depth of cup" in Ericksen ductility tests increased from 3.0 to 4.2 mm. Annealing for longer than 15 min brought about no marked changes in the mechanical properties and microstructure. Changes in the alloy strength level with annealing at 1150—1250°C were practically independent of the ambient media, although a decrease in elongation was observed in sheets annealed in hydrogen and in vacuum. Full recrystallization of strain-hardened sheets occurred at 1350—1400°C. This resulted in a 40—70% decrease in the strength, while an appreciable anisotropy of the properties sharply impaired the workability of the material. Recrystallized sheets had an uncrystallized surface layer 0.04—0.07 mm thick, which constituted 20—40% of the cross section area of the investigated sheets. This layer, resulting probably from contamination of the surface layers in rolling molybdenum alloys in the air, significantly impaired the mechanical and technological properties of the material. Formation of this layer can be prevented by rolling the material in an inert atmosphere or by removing the material after hot pressure working. Orig. art. has: 3 figures and 4 tables.

[MS]

SUB CODE: 11, 13/ SUBM DATE: none/ ATD PRESS: 5116

Card 2/2

GERKE, P.Ya., akademik, otv.red.; VINOGRADOVA, O.N., prof., doktor biolog. nauk, red.; BOGOYAVLENSKIY, K.S., prof., doktor biolog.nauk, red.; TSINOVSKIY, Ya.P., doktor biolog.nauk, red.; DEMIDOVA, V.K., kand.med.nauk, red.; BAZHANOVA, S., red.; BOKMAN, R., tekhn.red.

[Problems in cytology, histology and embryology] Voprosy tsitologii, gistologii i embriologii. Riga, Izd-vo Akad.nauk Latviiskoi SSR, 1960. 278 p. (MIRA 15:5)

1. Latvijas Padomju Socialistiskas Republikas Zinatnu akademijs Biologijas instituts. 2. AN Latviyskoy SSR (for Gerke).
  3. Institut eksperimental'noy meditsiny Akademii nauk Latviyskoy SSR (for Gerke, Demidova). 4. Latviyskaya sel'skokhozyaystvennaya akademiya (for Vinogradova). 5. Gel'mintologicheskaya laboratoriya Akademii nauk SSSR (for Bogoyavlenskiy). 6. Institut biologii Akademii nauk Latviyskoy SSR (for TSinovskiy).
- (CYTOLOGY) (HISTOLOGY) (EMBRYOLOGY)

BOGOYAVLENSKIY, L. I.

BOGOYAVLENSKIY, L. I. I IVANOVA, A. M.

36173 Novyy vid otdelki stal'nykh detaley priborov. (Primeneniye elektrolit. bronzirovaniya na zavode "Elektropribro"). Priborostroeniye, vyp. 4, 1948, S. 44-47.

SO: Letopis' Zhrunal'nykh Statey, No. 49, 1949

BOGOYAVLENSKIY, L. I.

PHASE I  
BOOK

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 594 - I

Call No.: TA 467.V6

Authors: VOL'FSON, A. I. and BOGOYAVLENSKIY, L. I., Engineers

Full Title: INCREASING THE CORROSION RESISTANCE OF ZINC COATING ON PARTS BY THE  
METHOD OF CHROMATE PASSIVATORS

Transliterated Title: Povysheniye korrozionnoy stoykosti tsinkovykh pokrytiy detaley  
metodom khromatnoy passivatsii

PUBLISHING DATA

Originating Agency: None

Publishing House: State Scientific and Technical Publishing House of Machine-Building  
and Shipbuilding Literature

Date: 1953

No. pp.: 60

No. of copies: 2,000

Editorial Staff

Editor: Bogoyavlenskiy, L. I.

Editor-in-Chief: Tsai, K. I.

Appraiser: Bogorad, I. Ya., Kand. of Tech. Sci.

PURPOSE: This booklet is intended for engineers, technicians and foremen of galvanizing  
shops. It can also be used as a reference tool by constructors, technologists and  
workers of technical control sections and of standardization sections in enterprises  
for machine and instrument construction.

TEXT DATA

Coverage: This booklet explains methods of chromate passivators for zinc coatings,  
which lately have found a wide application in machine and instrument building plants  
in the Soviet Union. Experiments in the research of processes of chromate passivity  
of zinc coatings, performed in 1951-1952 are summarized. The first part of this

Povysheniye korrozionnoy stoykosti tsinkovykh pokrytiy detaley  
metodom khromatnoy passivatsii

AID 594 - I

booklet outlines conditions for obtaining chromate films on zinc coatings, shows the kinetics of their forming and growth in different chromate solutions, and the physicochemical properties and corrosion resistance of chromate zinc coatings. In the second part, technological processes are given for obtaining chromate zinc coatings on steel parts and methods of control of the quality of coatings which are adopted in series production. Three appendices are added: method of analysis of cyanide electrolyte for zinc plating; method of analysis of bichromate solution used to produce passivity of zinc coatings; chemicals and anodes used in zinc plating processes with chromate passivators (with their All-Union Standard Numbers). The text is supplemented with many diagrams and tables.

No. of References: 5 Russian, 1948-1952

Facilities: A great number of scientific workers are mentioned in the text.

GINBERG, Aleksandr Mironovich; BOGOYAVLENSKIY, L.I., otvetstvennyy redaktor;  
ALEKSEYEVA, M.N., redaktor; KONTOROVICH, A.I., tekhnicheskiy redaktor

[Electropating] Gal'vanotekhnika. Leningrad, Gos. soiuзное izd-vo  
sudostroitel. promyshl., 1956. 186 p. (MLRA 9:11)  
(Electroplating)



BOGOYAVLENSKII, I. N.

Bogoyavlenskii, I. N. "Concerning the Influence of Geophysical Factors on the Frequency of Lightning in a Given Territory." Elektrichestvo, Moscow, vol. 5, No. 1, 1931, pp. 266-275.

BOGOYAVLENSKIY, L. N.

Bogoyavlenskii, L. N. Units of Radioactivity (Methods of Determining Radioactivity).  
Vestnik Standardizatsii, Moscow, No. 10 (34), 1931, pp. 56-59.

MIRONOV, V.I., inzh.; BOGOYAVLENSKIY, L.P., inzh.

Construction and testing of the body of a mesh-reinforced concrete channel clearing crane with a 10-ton lifting capacity. Sudostroenie 30 no.12:46-49 D '64.

(MIRA 18:6)

BOGOYAVLENSKIY, M.S.

Improving temperature control systems for electric furnaces.

Priborostroenie no.3:24 Mr '61.

(MIRA 14:3)

(Electric furnaces—Safety appliances)

BOGOYAVLENSKIY, M.S.; VASHCHENKO, A.I.; DENISOV, A.N.; ZHETVIN, A.N.; ZEN'KOVSKIY, A.G.; MAKAROV, D.M.; MAKSIMOV, B.M.; FILATOVA, A.I.; SHABUNIN, Ye.M.

Oxidation and decarburizing of certain steels in duo-muffle furnaces of nonoxidizing heating. Stal' 23 no.12:1124-1126 D '63. (MIRA 17:2)

BOGOYAVLENSKIY, N. A., Lt Col

PA 26/49T70

USSR/Medicine - Parasitology  
Medicine - Insects, Eradication

Jul 48

"Control of Parasitic Insects in the Moscow Area,"  
Lt Col N. A. Bogoyavlenskiy, Med Corps, Dr Med  
Sci, Chair of Hist of Med, Mil Med Acad, 4 3/4 pp

"Gig 1 San" No 7

Refers to valuable Russian medical manuscripts  
of the 16th-17th century revealing 22 kinds of  
Arthropoda, and methods for their control. Sug-  
gests study of these ancient medical handbooks  
by physicians, biologists, and pharmacists as an  
aid in preventing "rediscovery" of previously  
known facts.

26/49T70

BOGOYAVLENSKIY, N. A., Lt Col

PA 26/49T71

USSR/Medicine - Angina  
Medicine - Bacteria, Culture

Jul 48

"Etiology of Alimentary-Toxic Aleukia (Septic Angina)," Lt Col N. A. Bogoyavlenskiy, Med Corps, Dr Med Sci, Chair of Hist of Med, Mil Med Acad, 52 pp

"Gig 1 San" No 7

Refers to epidemiological inspections which disclose the etiology of alimentary-toxic aleukia. Tests on monkeys, fed with the toxic culture *Fusarium sporotrichoids*, revealed symptoms of subject disease.

26/49T71

BOGOYANLENSKIY, N.A.

Certain characteristics of medicine in Moscovite Russia  
Sov. med. 16 no. 2, 1952



BOGOYAVLENSKIY, N.A., doktor meditsinskikh nauk (Leningrad)

Medicine in old Russia. Vol'd. 1 akush. no.9:26-30 8 '54.

(HISTORY, MEDICAL  
in Russia)

(MLRA 7:11)

*BOGOYAVLENSKIY, N.A.*

BOGOYAVLENSKIY, N.A., doktor meditsinskikh nauk (Leningrad)

300th anniversary of the opening of the first medical school in  
Russia (1654) Fel'd. i akush. no.1:40-45 Ja '55. (MLRA 8:3)

(SCHOOLS, MEDICAL history,  
in Russia, first med. school)

BOGOYAVLENSKIY, N.A., doktor meditsinskikh nauk, (Leningrad)

Indo-Russian relations in ancient times. Fel'd. i akush. no.7:  
38-43 J1 '55. (MLBA 8:10)

(PHARMACY, hist.  
in Russia, relations with India)

BOGOYAVLENSKIY, Nikolay Alekseyevich; PETROV, B.D., redaktor; KHARASH, G.A.,  
~~tekhnicheskij redaktor~~

[Indian medicine in old Russian doctoring] Indiiskaya meditsina v  
drevnerusskom vrachevanii. [Leningrad] Gos. izd-vo med. lit-ry,  
Leningradskoe otd-nie, 1956. 81 p. (MIRA 10:1)  
(MEDICINE--HISTORY)

BOGOYAVLENSKIY, N.A., doktor meditsinskikh nauk (Leningrad)

Three hundred and seventy-five years since the passage of the drug  
law in Russia. Fel'd. 1 akush. 21 no.2:26-31 F '56. (MLRA 9:5)  
(PHARMACY--HISTORY)

BOGOYAVLENSKIY, N.A., doktor meditsinskikh nauk (Leningrad)

Reflection of cultural bonds between peoples in the field of  
medicine. Fel'd. i akush. 21 no.8:32-37 Ag '56. (MLRA 9:10)  
(MEDICINE--HISTORY)

BOGOYAVLENSKIY, N.A., doktor meditsinskikh nauk (Leningrad)

Notes on the hygiene and living conditions among the first settlers  
of the Russian North. Fel'd. i akush. 21 no.11:29-33 N '56.

(MLRA 9:12)

(RUSSIA, NORTHERN--PUBLIC HEALTH--HISTORY)

BOGOYAVLENSKIY, N.A., doktor meditsinskikh nauk (Leningrad)

"Canons of medical sciences", Abu-Ali-Ibn-Sina (Avicenna) Reviewed  
by N.A. Bogoiavlenskii. Klin. med., 34 no.2:90-92 F '56 (MLRA 9:6)

(MEDICINE)



BOGOYAVLENSKIY, N.A., doktor meditsinskikh nauk

Important bibliographic work on the history of Russian medicine and public health ("History of Russian medicine and public health" by D.M.Rossiiskii; Reviewed by N.A.Bogoiavlenskii). Sov.zdrav. 16 no.5:58-60 My '57. (MLRA 10:7)

(BIBLIOGRAPHY--MEDICINE--HISTORY)  
(ROSSIISKII, D.M.)

~~BOGOTAVLENSKIY, N.A.~~ doktor meditsinskikh nauk (Leningrad, pr. Maklina, 45,  
kv. 10)

History of transportation and of rendering first aid to the wounded  
in Old Russia; according to the monuments of ancient Russian texts  
and art of the 9th - 17th centuries. Vest.khir. 78 no.1:121-131  
Ja '57. (MLSA 10:3)

(MEDICINE, MILITARY AND NAVAL, hist.  
transportation of sick & wounded & first aid in  
Old Russia)

BOGOYAVLENSKIY, N.A.

Ancient Russian views on the bad effects of drunkenness on human  
health. Vop. psikh i nevr. no.3:348-357 '58. (MIRA 12:3)  
(ALCOHOLISM)

BOGOYAVLENSKIY, N.A., doktor med.nauk

"Trudy" of the Semashko Institute of Public Health Organization  
and Medical History., no.1: Problems in the history of medicine.  
Reviewed by N.A. Bogoyavlenskii. Sov.zdrav.17 no.11:63-64 N158  
(MEDICINE) (MIRA 11:10)

BOGOYAVLENSKIY, N.A.

"Medicine in the Russian Navy in the 18th century" by S.S. Mikhailov. Reviewed by N.A. Bogoyavlenskii. Sov.zdrav. 18 no.1:51 '59.  
(MIRA 12:2)

(MEDICINE, NAVAL)  
(MIKHAILOV, S.S.)

BOGOYAVLENSKIY, N.A., doktor med. nauk (Leningrad)

~~Images of the great physicians of ancient China. Fel'd. i akush.~~  
24 no.7:24-30 J1 '59. (MIRA 12:10)  
(CHINA--PHYSICIANS)

BOGOYAVLENSKIY, N.A. (g. Leningrad)

"Essays on the history of medicine in Moldavia" by N.M. Bzhov.  
Reviewed by N.A. Bogoyavlenskii. Zdravookhranenie 2 no.5:62-  
63 S-O '59. (MIRA 13:4)

(MOLDAVIA--MEDICINE)

BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad, pr. Maklina, 45, kv.10)

Brief historical sketch of surgery in the Chinese People's Republic.  
Vest.khir. 83 no.10:12-22 0 '59. (MIRA 13:2)  
(SURGERY history)



BOGOYAVLENSKIY, Nikolay Alekseyevich; RYABOV, G.Z., red.; BUL'DYAYEV,  
N.A., tekhn.red.

[Early Russian medical care from the 11th to the 17th century;  
sources for the study of the history of Russian medicine]  
Drevnerusskoe vrachevanie v XI-XVII vv.; istochniki dlia izu-  
chenia istorii russkoi meditsiny. Moskva, Gos.izd-vo med.lit-ry,  
1960. 325 p. (MIRA 13:9)

(MEDICINE)

BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad)

Medicine and hygiene among the African peoples as revealed by old  
Russian literature and the impressions of Russian travelers. Fel'd.  
i akush. 25 no.4:44-48 Ap '60. (MIRA 14:5)

(AFRICA--MEDICINE)

BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad)

From the early history of obstetrics in Russia. Fel'd. i akush. 25  
no.11:45-49 N '60. (MIRA 13:11)  
(OBSTETRICS)

BOGOYAVLENSKIY, N.A.

Sanitary conditions and aid to sick and wounded in the rebel  
camp in Idianshan'bo in the 12th century (China). Vest.khir.  
84 no.1:140-143 Ja '60. (MIRA 13:10)  
(CHINA—MEDICINE, MILITARY)

BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad)

Child hygiene in Russia before Peter the Great. Sov.zdrav. 20  
no.2:73-77 '61. (MIRA 14:5)  
(CHILDREN--CARE AND HYGIENE)

BOGOYAVLENSKIY, N.A., doktor med.nauk

"History of medicine," vols.1-2, published by the Latvian Academy  
of Sciences. Reviewed by N.A. Bogoiavlenskii. Sov.zdrav. 20 no.4:  
76-77 '61. (MIRA 14:5)

(BALTIC STATES—MEDICINE)

BOGOYAVLENSKIY, N.A., doktor med.nauk; NEVSKIY, V.A.

"Bibliographical index." Materials for a history of the S.M.Kirov  
Military Medical Academy. Edited by A.A.Shibkova. Reviewed by  
N.A.Bogoiavlenskii. Sov. zdrav. 20 no.7:90-92 '61. (MIRA 15:1)  
(BIBLIOGRAPHY--MEDICAL COLLEGES) (SHIBKOVA, A.A.)

<sup>Y</sup>  
BOGOYALENSKIY, N.A., doktor med.nauk (Leningrad)

Reflection of the medical traditions and peculiarities of the  
hygienic habits of the Japanese people in Russian literature.  
Fel'd. i akush. 26 no. 1:39-45 Ja '61. (MIRA 14:2)  
(JAPAN—MEDICINE)



BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad)

Some facts from the history of Russo-Cuban medical relations. Fel'd.  
i akush. 26 no.5:31-37 My '61. (MIRA 14:5)  
(~~MEDICINE~~—INTERNATIONAL COOPERATION)

BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad)

"Your health" by B.D.Petrov. Reviewed by N.A.Bogoiavlenskii.  
Fel'd. i akush. 26 no.5:63-64 My '61. (MIRA 14:5)  
(HYGIENE) (PETROV, B.D.)

BOGOYAVLENSKIY, N.A., doktor meditsinskikh nauk (Leningrad)

Sources of the hygienic practices of the Chinese people. Fel'd.  
i akush. 26 no.12:31-35 D '61. (MIRA 14:12)  
(CHINA—PUBLIC HEALTH)

BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad)

A.I.Gertsen and the history of Russian medicine; on the 150th anniversary  
of his birth. Sov. zdrav. 21 no.4:10-14 '62. (MIRA 15:5)

(GERTSEN, ALEKSANDR IVANOVICH, 1812-1870)  
(MEDICINE)

BOGOYAVLENSKIY, N.A., doktor med.nauk

"Lectures on the history of Russian medicine. First lecture:  
Medicine in ancient Russia" by M.K.Kuz'min. Reviewed by N.A.  
Bogoiavlenskii. Sov. zdrav. 21 no.6:93-94 '62. (MIRA 15:5)  
(MEDICINE) (KUZ'MIN, M.K.)

BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad)

Feldshers and the services rendered by them on the sanitary-  
epidemiological front; brief historical review. Fel'd. i akush.  
27 no.1:44-49 Ja '62.

(MIRA 15:3)

(MEDICAL PERSONNEL)  
(EPIDEMIOLOGY)

BOGOYAVLENSKIY, N.A., prof. (Leningrad)

"Popular medical encyclopedia". Reviewed by N.A. Bogoiavlenskii.  
Fel'd. i akush. 27 no.1:62-63 Ja '62. (MIRA 15:3)  
(MEDICINE--DICTIONARIES)

BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad)

Participation of feldshers in the social and revolutionary  
movement in Russia. Fel'd. i akush. 27 no.12:36-39 D'62.  
(MIRA 16:7)

(RUSSIA-INTELLECTUAL LIFE) (MEDICAL PERSONNEL)



SALIVANOV, V.I., kand. med. nauk; BOGOYAVLENSKIY, N.A., dr. med. nauk (Leningrad)

P.I. Bagration's care for the health of the Russian soldier;  
on the 150th anniversary of the war of 1812 and the 150th  
anniversary of P.I. Bagration's death. Sov. zdav. 21 no.9:  
71-73 '62 (MIRA 17:4)

BOGOYAVLENSKIY, Nikolay Alekseyevich; LISITSYN, Yuriy Pavlovich;  
RYABOV, G.Z., red.; KOROLEV, A.V., tekhn. red.

[Russian Cuban medical relations] O Russko-kubinskiikh meditsinskikh svyaziakh. Moskva, Medgiz, 1963. 86 p.  
(MIRA 16:6)

(RUSSIA--RELATIONS (GENERAL) WITH CUBA)  
(CUBA--RELATIONS (GENERAL) WITH RUSSIA)

BOGOYAVLENSKIY, N.A., doktor med.nauk (Leningrad)

Importance of archaeological data in the study of the history  
of native medicine. Sov. zdrav. 22 No. 6:66-71 '63 (MIRA 16:9)  
(ARCHAEOLOGY) (MEDICINE)

BOGOYAVLENSKIY, N.A. (Leningrad)

History of the discovery of the original manuscript which  
was used by E.Slavinetskii in his translation of Vesalius'  
anatomy. Arkh. anat., gist. i embr. 49 no.10:90-95 0 '65.  
(MIRA 18:12)

1. Submitted Dec. 14, 1964.

BOGOYAVLENSKIY, N.I.

Multi-section building for ensilage  
Korm. baza 3 no. 4, 1952

BOGOYAVLENSKIY, N.N. (Leningrad).

Transorbital extraction of foreign body with diagnosis of sub-  
dural abscess. Vest.oto-rin. 16 no.1:76 Ja-F '54. (MLRA 7:3)  
(Brain--Abscess) (Brain--Foreign bodies)

BOGOYAVLENSKIY, N.N. (Leningrad)

Orbital emphysema in concealed injuries of the paranasal sinuses.

Vest. oto-rin. 16 no.6:69-70 N-D '54.

(MLRA 8:1)

(PARANASAL SINUSES, wounds and injuries

with orbital emphysema)

(ORBIT, diseases

emphysema in inj. of paranasal sinuses)

(EMPHYSEMA

orbit, in inj. of paranasal sinuses)

(WOUNDS AND INJURIES

paranasal sinuses, with orbital emphysema)

BOGOYAVLENSKIY, N.N. (Leningrad)

"Eye-hole" bandage for the frontal region. Vest.oto-rin 17 no.4:  
63 J1-Ag '55. (MLRA 8:10)

(BANDAGING AND DRESSING,  
of frontal region)

(HEAD, surgery,  
dressing of frontal region)



L 24556-66 EWT(1)/EWA(h)

AGG NR: AP6006336

SOURCE CODE: UR/0413/66/000/002/0058/0058

AUTHORS: Bogoyavlenskiy, N. I.; Grinshteyn, V. I.; Ol'nov, V. M.

ORG: none

TITLE: Frequency difference relay, Class 21, No. 177987 [announced by Chuvash  
Electrical Engineering Scientific Research Institute (Chuvashskiy  
elektrotekhnicheskiy nauchno-issledovatel'skiy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 58

TOPIC TAGS: electronic circuit, sensitivity increase, electric relay

ABSTRACT: This Author Certificate presents a frequency difference relay. The relay contains a phase detector, silicon stabilitrons for protecting the input circuits, an integrating component, a storage trigger, and an operating element (see Fig. 1). The design increases the sensitivity of the relay to the magnitude of the residual voltage of the generator. The generator is synchronized with the line supply. Germanium diodes are connected to the parallel protected silicon stabilitrons.

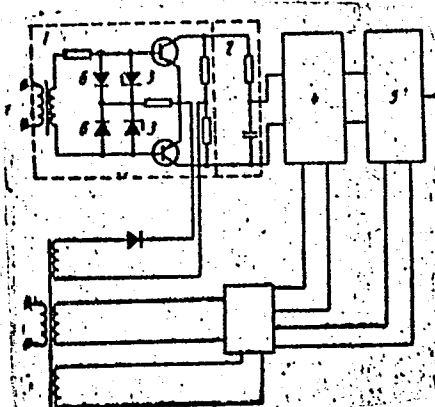
Card 1/2

UDC: 621.318.57

L 24556-66

ACC NR: AP6006336

Fig. 1. 1 - phase detector; 2 - integrating component; 3 - silicon stabilitrons; 4 - storage trigger; 5 - operating element; 6 - germanium diodes.



Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 14Dec64

Card 2/2

P.B

25(2)

SOV/117-59-6-10/33

AUTHOR: Bogoyavlenskiy, N.P.

TITLE: Modernization of a Single-Post Crank Press

PERIODICAL: Mashinostroitel', 1959, Nr 6, p 20 (USSR)

ABSTRACT: The article explains how an old 100 ton crank press was modernized at the Kolomenskiy teplovozostroitel'-nyy zavod (Kolomna Diesel Locomotive Plant). The press had various design faults and the following changes were made: the gear transmission was replaced by a V-belt and the old cam coupling (switching on the press stroke) was replaced by a coupling with two pivot keys (Figure 1) controlled by an electromagnet; the journal bearings were replaced by roller bearings; the cross head adjusting screw (Figure 2) was provided with a ball end. Other presses of 70 and 35 tons have been modernized in the same way. There are 5 diagrams.

Card 1/1

BOGOYAVLENSKIY, N.Ya., doktor med.nauk (Leningrad)

On the translation into Russian of the anatomical treatise of Andreas  
Vesalins. Klin.med. 37 no.9:150-152 S '59. (MIRA 12:12)  
(ANATOMY) (VESALIUS, ANDREAS 1514-1564)

BOGOYAVLENSKIY, O. N.

Cand AgrSci - (diss) "Sowings of corn with expanded inter-row spacing and their effect on winter wheat harvest." Voronezh, 1961. 20 pp; (Ministry of Agriculture RSFSR, Voronezh Agricultural Inst); 150 copies; price not given; (KL, 5-61 sup, 197)

USSR/Human and Animal Morphology - (Normal and Pathological)  
Reproductive System.

S

Abs Jour : Ref Zhur Biol., No 6, 1959, 26210

Author : Dogoyavlenskiy, O.V.

Inst : -

Title : Blood Vessels of Human Placenta

Orig Pub : V sb.: Stroyeniya, krovosnabzh. i innervatsiya vnutr.  
organov, Ch. 2, Stalingrad, 1957, 183-187

Abstract : No abstract.

Card 1/1

USSR/Human and Animal Morphology - (Normal and Pathological)  
Reproductive System.

S

Abs Jour : Ref Zhur Biol., No 6, 1959, 26209

Author : Bogoyavlenskiy, O.V.

Inst : -

Title : The Vessels of Placenta in Membranous Attachment of  
Unbilical Cord.

Orig Pub : V sb.: Stroyeniya, krovosnabzh. i innervatsiya vnutr.  
organov. Ch. 2, Stalingrad, 1957, 188-192

Abstract : No abstract.

Card 1/1

- 36 -

BOGOYAVLENSKIY, O. V.: Master Med Sci (diss) -- "The vascular system of the human placenta in normal and pathological development of the fetus". Stalingrad, 1958. 23 pp (Stalingrad State Med Inst), 200 copies (KL, No 6, 1959, 142)



CA BOGOYAVLENSKIY, P.S.

2

Polytherm of the ternary system potassium dichromate-potassium bromide-water. P. S. Bogoyavlenskii (L'vov. Veterinarnyi Inst.). Zhur. Obshch. Khim. (J. Gen. Chem.) 19, 1987-93 (1949).—Solv.-l.p. relations in the system  $K_2Cr_2O_7$ -KBr- $H_2O$  were investigated in the range of temp. from  $-61^\circ$  to the ternary eutectic point. The temp. at which both br and  $K_2Cr_2O_7$  are the solid phases decreases from  $-0.6$  to  $-9.3^\circ$  as the ratio between KBr and  $H_2O$  increases from 3.97 to 86.86:74.14, on a wt. percentage basis. The corresponding soly. of  $K_2Cr_2O_7$  decreases from 3.0% to 0.31%. Isotherms in the range  $0-40^\circ$  measured at  $10^\circ$  intervals indicate that solns. satd. with respect to both  $K_2Cr_2O_7$  and KBr contain these in the following ratios on a mole percentage basis: 0.03:7.56 at  $0^\circ$ ; 0.04:6.49 at  $10^\circ$ ; 0.06:5.94 at  $20^\circ$ ; 0.10:5.63 at  $30^\circ$  and 0.16:10.38 at  $40^\circ$ . The ternary eutectic point is at  $-11.7^\circ$ , and the soln. contains 81.66% KBr, 0.2%  $K_2Cr_2O_7$ , and 86.76%  $H_2O$ . In satd. solns. of  $KNO_3$ , KCl, and KBr, the soly. of  $K_2Cr_2O_7$  at  $0^\circ$  in terms of the mole fraction of  $Cr_2O_7^{2-}$  decreases, resp., in the following ratios: 2.5:1, 19.02:1, and 11.68:1 compared with the soly. in solns. contg. only  $K_2Cr_2O_7$ . The same portions obtain also at other temps. A. Leviton.



AID P - 2267

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 12/19

Authors : Bogoyavlenskiy, P. S. and G. V. Sukmanskaya

Title : ~~System NaCl - Na<sub>2</sub>SO<sub>4</sub> - H<sub>2</sub>O (artificial Carlsbad salt)~~  
at 25 and 38°C. Part II.

Periodical: Zhur. prikl. khim., 28, no.2, 208-211, 1955

Abstract : The solubility of NaCl and Na<sub>2</sub>SO<sub>4</sub> in water and in dilute solutions of acetic acid (0.5 and 2.5%) at 38°C is described. Three tables, 2 diagrams, 3 ref. (all Russian: 1930-1952).

Institution: L'vov Veterinary and Zootechnical Institute, Chair of Inorganic Chemistry

Submitted : Ap 30, 1953

AID P - 2289

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 16/21

Authors : Bogoyavlenskiy, P. S. and A. S. Manannikova

Title : ~~System NaCl - NaHCO<sub>3</sub> - H<sub>2</sub>O (artificial Carlsbad salt)~~  
System NaCl - NaHCO<sub>3</sub> - H<sub>2</sub>O (artificial Carlsbad salt)  
at 25 and 38°C.

Periodical: Zhur. prikl. khim., 28, no.3, 325-328, 1955

Abstract : Sodium chloride decreases the solubility of NaHCO<sub>3</sub>  
markedly. One table, 1 diagram, 3 references  
(2 Russian: 1930-1948).

Institution: L'vov Veterinary and Zootechnical Institute. Chair  
of Inorganic Chemistry

Submitted : Ap 30, 1953

BOGORYAVLENSKIY, P. S.

USSR/Chemistry - Analysis

Card 1/2      Pub. 22 - 21/51

Authors      : Bogoyavlenskiy, P. S.

Title        : Effect of anion structures on the solubility in  $\text{KNO}_3$ - $\text{KNCS}$ - $\text{H}_2\text{O}$  and  $\text{KNO}_3$ - $\text{KBr}$ - $\text{H}_2\text{O}$  systems

Periodical   : Dok. AN SSSR 101/5, 865-868, Apr 11, 1955

Abstract     : Two ternary salt systems were investigated isothermally to determine the effect of the anion structure on the solubility in these systems. A comparative evaluation of experimental results showed that the solubility of the component salts in binary and ternary solutions depends upon the anion effect on the thermal migration of water molecules. It was also established that the effect of an analogous

Institution   : The Zooveterinary Inst. L'vov

Presented by : Academician I. I. Chernyayev, November 22, 1954

*Bogoyavlenskii, P.S.*  
 USSR/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria, B-8  
 Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 7168.

Author : G.V. Sukmanskaya, P.S. Bogoyavlenskii.

Inst. :

Title :  $\text{Na}_2\text{SO}_4$  -  $\text{NaOHCO}_3$  -  $\text{H}_2\text{O}$  System (Carlsbad Salt) at 25 and 38°.

Orig Pub: Zh. prikl. khimii, 1957, 30, No 6, 947 - 952.

Abstract: Equilibria in the system  $\text{Na}_2\text{SO}_4$  -  $\text{NaHCO}_3$  -  $\text{H}_2\text{O}$  at 25 and 38° were studied by the isothermal method. Measures described in a previous report (RZhKhim, 1956, 28476) were taken in order to avoid sodium carbonate formation. The joint solubility in the system is characterized by a considerable out-salting action of  $\text{Na}_2\text{SO}_4$  on  $\text{NaHCO}_3$ . The following appear as solid phases:  $\text{NaHCO}_3$  and  $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$  for the 25° isotherm, and  $\text{NaHCO}_3$  and  $\text{Na}_2\text{SO}_4$  for the 38° isotherm. Based on the solubility data in the system at 38°, some ways of using the

Card : 1/2

(Vet.-Zootech. Inst. L'vov).  
 -39-

AUTHOR: Bogoyavlenskiy, P. S. SOV/76-32-9-14/46

TITLE: The Effect of Large Monovalent Ions on the Structure of Water and Its Influence on the Solubility of Salts (O vliyani  
na rastvorimost' soley effekta vozdeystviya bol'shikh  
odnozaryadnykh ionov na strukturu vody)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 9,  
pp 2035 - 2041 (USSR)

ABSTRACT: The author investigated the solubilities of the following systems at 25°C:  $\text{KNO}_3$ -KSCN- $\text{H}_2\text{O}$  (Table 1),  $\text{KNO}_3$ -KBr- $\text{H}_2\text{O}$  (Table 2),  $\text{NH}_4\text{NO}_3$ - $\text{NH}_4\text{SCN}$ - $\text{H}_2\text{O}$  (Table 3), and  $\text{NH}_4\text{NO}_3$ - $\text{NH}_4\text{Br}$ - $\text{H}_2\text{O}$  (Table 4). S.K.Piro participated in the experimental work. The author found that the difference in solubility of salts is mainly caused by the fact that anions of negative hydration are produced. The negative hydration decreases in the series  $\text{NO}_3^-$ ,  $\text{Br}^-$ ,  $\text{SCN}^-$ . The change of the water structure in the ternary solutions allows a closer packing which makes possible a high salt concentration in the liquid phase. There are 4 tables and 23 references, 23 of which are Soviet.

Card 1/2

The Effect of Large Monovalent Ions on the Structure of SOV/76-32-9-14/46  
Water and Its Influence on the Solubility of Salts

ASSOCIATION: Zooveterinarnyy institut, L'vov (L'vov Veterinary Institute)

SUBMITTED: April 16, 1957

Card 2/2



BOGOYAVLENSKIY, P.S.

Effect of the structures of solid and liquid phases on the solubility of salts in water. Part 1: Solubility in the systems  $\text{NH}_4\text{NO}_3 - \text{NH}_4\text{I} - \text{H}_2\text{O}$  and  $\text{KNO}_3 - \text{KI} - \text{H}_2\text{O}$  at  $25^\circ \text{C}$ . Zhur. strukt. khim. 1 no. 3:305-312 S-G '60. (MIRA 14:1)

1. L'vovskiy zooveterinarynyy institut.  
(Solubility) (Systems (Chemistry))

BOGOYAVLENSKIY, P.S.; SYUY KE-MIN' [Hsü K'o-min]

Influence of the structures of solid and liquid phases on the solubility of salts in water. Part 2: Influence of anion structure on the solubility in the systems KCNS - KI - H<sub>2</sub>O and KCNS - KCl - H<sub>2</sub>O. Zhur. strukt. khim. 1 no. 4:425-430 N-D '60.  
(MIRA 14:2)

1. L'vovskiy zooveterinzrnyy institut i Universitet Fudan',  
Shagkhay, Kitayskaya Narodnaya Respublika.  
(Solubility) (Potassium thiocyanate) (Potassium iodide)  
(Potassium chloride)

BOGOZAVLENSKIY, P.S.; VAN LI-HUA [Wang Li-hua]

Influence of the structures of solid and liquid phases on the solubility of salts in water. Part 3: Influence of anion structure on the solubility in the systems  $\text{HCO}_2 - \text{KCl} - \text{H}_2\text{O}$  and  $\text{HCO}_2 - \text{KSCN} - \text{H}_2\text{O}$ . Zhur. strukt. khim. 1 no. 4:431-436 K-D '60.

(MIRA 14:2)

1. L'vovskiy zooveterinarnyy institut i Universitet Fudan',  
Shanghai, Kitayskaya Narodnaya Respublika.

(Solubility) (Potassium nitrite) (Potassium thiocyanate)  
(Potassium chloride)

**AUTHORS:** Sukmanskaya, G. V., Bogoyavlenskiy, P. S. S/078/60/005/04/037/040  
B004/B016

**TITLE:** On the Solubility in the System  $\text{Na}_2\text{SO}_4 - \text{NaHCO}_3 - \text{NaCl} - \text{H}_2\text{O}$

**PERIODICAL:** Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 4, pp 978 - 984  
(USSR)

**ABSTRACT:** This paper continues the investigation made by the authors concerning the components of Carlsbad salt (Refs 4,5). The solubility of the system mentioned in the title was investigated according to the isothermal method at 0, 20, 25, 30, and 38°. Furthermore, several of the ternary component systems were checked, for which the data available in publications are contradictory. The results are presented as follows: Solubility in the system  $\text{Na}_2\text{SO}_4 - \text{NaHCO}_3 - \text{NaCl} - \text{H}_2\text{O}$ : table 1, figures 1-4; solubility in the system  $\text{Na}_2\text{SO}_4 - \text{NaCl} - \text{H}_2\text{O}$  at 0°: table 2; the same system at 30°: table 5; system  $\text{Na}_2\text{SO}_4 - \text{NaHCO}_3 - \text{H}_2\text{O}$  at 0°: table 3; the same system at 20°: table 4. The solubility in the quaternary system is considerably affected by the solubilities in the ternary component systems. The data obtained by the authors on the composition of the

Card 1/2

On the Solubility in the System  $\text{Na}_2\text{SO}_4$  -  $\text{NaHCO}_3$  -  
-  $\text{NaCl}$  -  $\text{H}_2\text{O}$

S/078/60/005/04/037/040  
B004/B016

solid and liquid phases might be of use in the investigation of  
the curative properties of Carlsbad salt. The authors mention  
S. Z. Makarov, Vaksberg, and Fedot'yev (Ref 8). There are  
4 figures, 5 tables, and 9 references, 8 of which are Soviet.

SUBMITTED: January 30, 1959

Card 2/2

BOGOYAVLENSKIY, P.S., ~~MANANNIKOVA~~, A.S.

Solubility in the system  $\text{NH}_4\text{Br} - \text{KBr} - \text{H}_2\text{O}$ . Zhur.neorg.khim. 6  
no.4:977-984 Ap '61. 4 (MIRA 14:4)

(Ammonium bromide)

(Potassium bromide)

S/020/62/143/003/020/029  
B110/B101

AUTHORS: Sandulova, A. V., Bogoyavlenskiy, P. S., and Dronyuk, M. I.

TITLE: Preparation of solid solutions of the system Ge - Si from the gaseous phase

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 3, 1962, 610-612

TEXT: A method for preparing solid solutions was elaborated which is based on crystallization from the gaseous phase by using selenium as solvent. Thus, it becomes possible to cultivate single crystals of solid solutions in the entire possible concentration range on the basis of germanium and silicon. During condensation from the vapor, isomorphous atoms react with each other still in the vapor phase. They form structural compounds and make possible formation and growth of mixed crystals. The composition of the structural compounds depends on the partial concentrations of the atom types in the gaseous phase and is given if the rates of transition of the atoms from the crystals into the vapor are known. At 1000-1200°C and a selenium vapor pressure of 13-15 atm, the rates of

Card 1/3

Preparation of solid solutions of the ...

S/020/62/143/003/020/029  
B110/B101

dissolution of Ge and Si are closest to each other:  $6.5 \cdot 10^{-6}$  and  $5.2 \cdot 10^{-6}$  g/cm<sup>2</sup>.sec, respectively. This was considered for the cultivation of single crystals of solid solutions. The weighed portions of Ge and Si required for a given composition of the solid solution, as well as a certain weighed portion of Se were filled into a small quartz ampul. The ampul was evacuated to  $10^{-5}$  mm Hg and heated in an electric furnace for 2-5 days. The experiments were conducted at 10-15 atm Se vapor pressure and 1000-1250°C. The weights of Ge and Si corresponded to solid solutions, the composition of which changed stepwise by 5 atom %. The experiments were terminated on total dissolution of Ge and Si. Monocrystalline character, homogeneity and composition of the crystals obtained were investigated by X-ray analysis. On the Laue diffraction pattern of the crystal of a solid solution with 50 atom % Ge and 50 atom % Si, ray direction perpendicular to (100), symmetrical interference spots as well as clearly developed ellipses were ascertained, which proves the monocrystalline character. The lattice constants are inversely proportional (linear dependence) to the Si content, and are composed of the values of pure Ge and Si. Increase in resistivity with the Si content up to

Card 2/3



Preparation of solid solutions of the ...

S/020/62/143/003/020/029  
B110/B101

200-300 ohm·cm was observed. Sulfur, selenium, tellurium and iodine, may also be used as solvent. Professor A. I. Andriyevskiy is thanked for his advice. There are 3 figures.

ASSOCIATION: L'vovskiy politekhnicheskii institut (L'vov Polytechnic Institute)

PRESENTED: November 30, 1961, by N. V. Belov, Academician

SUBMITTED: November 16, 1961

Card 3/3

L 19570-63 EWP(q)/EWT(m)/EWP(B)/BDS AFFTC/ASD Pad JD/HW  
 ACCESSION NR: AP3007498 S/0181/63/005/009/2580/2586

AUTHOR: Sandulova, A. V.; Bogoyavlenskiy, P. S.; Dronyuk, M. I.

TITLE: Growing technique and properties of thread and needle crystals of germanium, silicon, and their solid solutions

SOURCE: Fizika tverdogo tela, v. 5, no. 9, 1963, 2580-2586

TOPIC TAGS: silicon thread crystal, germanium thread crystal, silicon needle crystal, germanium needle crystal, thread crystal, crystal growing technique, crystal growing, needle crystal, gas phase crystal growing, bromine, silicon, germanium

ABSTRACT: A new method of growing crystals is described, based on crystallization from the gas phase with the aid of a solvent. By this method it is possible to grow monocrystals of different shapes, lengths, and cross sections having a high mechanical strength and an adequate degree of purity and perfection of structure. A quartz capsule 28 cm long and 2.6 cm in diameter, divided by a neck into two interconnecting chambers, was used for the process. The larger chamber contained single crystals of the substance to be crystallized.

Card 1/3

L 19570-63

ACCESSION NR: AP3007498

together with the solvent substance (solid bromine, with iodine added in certain cases). The loaded capsule was evacuated in liquid nitrogen to a pressure of  $10^{-5}$  mm Hg, sealed, and placed in a furnace in which the larger chamber was maintained at 950—1250C and the smaller chamber, at 800—1000C. Full dissolution of the mother crystals occurred within 40—60 hr. Two types of crystals were formed in the smaller "cold" chamber of the capsule, a polycrystalline layer and bunches of threads and needles. Individual threads were straight and uniform in cross section, with lengths up to 30 mm. No indications of twinning were revealed by Laue diffraction patterns taken from the junctions and bends. Elongation of needles occurs along the third-order axis; the cross section of these needles is hexagonal. The threads had a thickness of several microns and a round cross section. In the case of Si it was possible to exercise a certain amount of control for preferential growing of threads or needles by manipulating the solvent vapor pressure and temperature gradient. The thickness of threads depends to some extent on the length and diameter of the neck connecting the chambers. For example, to grow Si threads in a 2-cm capsule, the neck diameter was narrowed to 6—8 mm, and the length, to 4 cm. Measurement data

Card 2/3

L 19570-63

ACCESSION NR: AP3007498

on the mechanical properties of threads and needles reveal great strength and elasticity, without plastic deformation. The strength of threads of 16—28- $\mu$  diameter averaged about 200 kg/mm<sup>2</sup> and reached a maximum of 500 kg/mm<sup>2</sup> in certain cases. The specific resistivity was generally found to be considerably higher than that of the mother crystals, owing to the higher degree of purity attained in the re-crystallization process. Orig. art. has: 7 figures and 3 tables.

ASSOCIATION: L'vovskiy politekhnicheskii institut (L'vov Polytechnic Institute)

SUBMITTED: 16Aug62

DATE ACQ: 14Oct63

ENCL: 00

SUB CODE: PH

NO REF SOV: 002

OTHER: 001

Card 3/3

SANDULOVA, A.V.; BOGOYAVLENSKIY, P.S.; DRONYUK, M.I.

Production and some properties of whiskers and acicular single  
crystals of germanium, silicon and their solid solutions. Pis. star  
tela 5 no.9:2580-2586 S '63. (MIRA 16:10)

SANDULOVA, A.V.; BOGOYAVLENSKIY, P.S.; DRONYUK, M.I.

Production of germanium and silicon single crystals from  
the gaseous phase by the addition of a second component.  
Dokl. AN SSSR 153 no.1:82-85 N '63. (MIRA 17:1)

1. L'vovskiy politekhnicheskii institut. Predstavleno  
akademikom A.V. Shubnikovym.

LOGOVAYLENSKIY, P.S.

Solubility and salting-out in the system  $K_2CO_3$  -  $KHCO_3$  -  $KCl$  -  
 $H_2O$  and 25 and 40°C. Zhur. neorg. khim. 10 no.7:1706-1710  
Jl '65. (MIRA 1968)

1. BOGOYAVLENSKIY, S.G., GERASHCHENKO, S.K.
2. USSR (600)
7. Mery <sup>B</sup>or'by s Vreditelyami i Boleznyami Sel'skokhozyaystvennykh Kul'tur. Uchebnoye Posobiye dlya Slushateley Trekhletnikh Agrotekhnicheskikh Kursov. Pervyy God Obucheniya (Measures for Combatting the Pests and Diseases of Agricultural Crops. Training Manual for Students of Three-Year Agrotechnical Courses. First Year of Instruction), Under the Editorship of G.A. Tishchenkov, Voronezh, 1951

9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified



*BOGOYAVLENSKIY, S.G.*

USSR/Farm Animals - Honey Bee

Q-5

Abs Jour : Ref Zhur - Biol., No 7, 1958, 31033

Author : Bogoyavlenskiy S.G., Mertis A.A.

Inst :  
Title : Temporary Isolation of Bees in Hives as a Protection  
from Poisoning.  
(Vremennaya izolyatsiya pchel v ul'yakh dlya zashchity  
ot otravleniy).

Orig Pub : Pchelovodstvo, 1957, No 8, 42-46

Abstract : The experiments carried out at the Voronezh Apicultural  
Institute showed that the influx of air only through the  
bee entrance and penetration of light through it causes  
the bees to gather around the bee entrance, which leads  
to their being "steamed". It is imperative to have the  
air draft device on top of the hive and in hot weather,  
to ventilate the hive vigorously under its roof. It is  
also necessary to give water to the bees plentifully  
and without interruption.

Card 1/1

BOGOYAVLENSKIY, S.M.

Basic principles of the organization of the construction of the  
Baltic State Regional Electric Power Plant. Energ.stroi. no.24:  
24-39 '61. (MIRA 15:4)

1. Zamestitel' glavnogo inzhenera Stroitel'nogo upravleniya  
Pribaltiyskoy gosudarstvennoy rayonnoy elektrostantsii,  
(Narva region--Electric power plants--Design and construction)

BOGOYAVLENSKIY, S.N.

Symposium on the comparison of methods for hydrochemical  
determinations at the sea. Okeanologiya 2 no.6:1113-1115  
'62. (MIRA 17:2)

Bogoyavlenskiy V.

Pervyye Zavody Po Proizvodstvu Slantsezolnogo Kirpicha, Goryuchiye  
Slantsy, 1934, No. 2, 9.

SO: Goryuchiye Slantsy No. 1934-35 TN .871  
.G74